

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated July 15, 2010 has been received and its contents carefully reviewed.

Claims 13-15, 18-23 and 27-38 are pending. Claim 22 is amended. Amended claim 22 is supported by Fig. 8A. Claims 27-37 have previously been withdrawn. Accordingly, claims 13-15, 18-23 and 38 remain currently pending for examination in this application. Reexamination and reconsideration of the pending claims are respectfully requested.

In the Office Action, claims 13-15, 18-19 and 22-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,371,324 to Sinoto (hereinafter “Sinoto”) in view of Melles-Griot Optics Catalog (Optics Guide 5) (hereinafter “Melles-Griot”) and U.S. Patent No. 4,624,537 to Hanssen et al. (hereinafter “Hanssen”). Claims 20-21 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinoto in view of Melles-Griot and Hanssen, and in further view of U.S. Patent No. 3,912,920 to Kubota (hereinafter “Kubota”).

The rejections of claims 13-15, 18-23 and 38 are respectfully traversed, and reconsideration is requested.

Claims 13-15 and 18-23 are allowable in that independent claim 22 recites a combination of elements including, for example, “a plurality of quartz substrate parts, each quartz substrate part comprises one quartz substrate or a plurality of quartz substrates stacked on top of one another; a polarizer holder having a lattice like structure and directly supporting each quartz substrate part, wherein the polarizer holder includes a material having an optical absorptivity of almost 100%, and wherein the polarizer holder absorbs light reflected by the plurality of quartz substrate parts, wherein an end portion of a first quartz substrate part is supported on a bottom surface of a first segment of the polarizer holder and an opposite end portion of the first quartz substrate part is supported on a top surface of a second segment of the polarizer holder, and an end portion of a second quartz substrate part is supported on the top surface of the second segment of the polarizer holder and an opposite end portion of the second

quartz substrate part is supported on a bottom surface of a third segment of the polarizer holder.” However, none of the cited references including Sinoto, Melles-Griot, Hanssen and Kubota teaches or suggests these feature of the present application.

In the rejection of claim 22, the Examiner states that Sinoto discloses “a plurality of substrate parts (e.g. 18, information cells), each substrate parts comprising one substrate (each information cell contains a number of arrays which may be varied in accordance with requirements imposed upon the system such that only one array, or substrate part could be used I the information cell [col. 2, lines 50-64]); wherein each transparent substrates (e.g. 28, 30, 32, 34) is made of plastic and produces polarized light; a polarizer holder (36, opaque border) having a lattice like structure and directly supporting each substrate part (note: the opaque border individually supports each array).” (see Office Action, page 4). However, Applicants submits Sinoto fails to teach or suggest “a plurality of quartz substrate parts, each quartz substrate part comprises one quartz substrate or a plurality of quartz substrates stacked on top of one another; a polarizer holder having a lattice like structure and directly supporting each quartz substrate part.” Sinoto teaches “An information cell (18) comprises four horizontal arrays (20, 22, 24 and 26) each comprising four tiny squares (28, 30, 32 and 34) of light polarizing material such as “Polaroid” plastic light-polarizing material sold by the Polaroid Corporation. Each square is secured to a transparent backing material such as glass. An opaque border (36) separates individual ones of the information cells (18) from one another.” Accordingly, the opaque border (36) of Sinoto does not directly support the information cell (18) corresponding to each substrate part of the claimed invention.

Additionally, none of the cited references teaches or suggests “wherein an end portion of a first quartz substrate part is supported on a bottom surface of a first segment of the polarizer holder and an opposite end portion of the first quartz substrate part is supported on a top surface of a second segment of the polarizer holder, and an end portion of a second quartz substrate part is supported on the top surface of the second segment of the polarizer holder and an opposite end portion of the second quartz substrate part is supported on a bottom surface of a third segment of the polarizer holder” as recited in amended independent claim 22.

Further, claims 13-15 and 18-23 are allowable because there is no suggestion or motivation to combine Sinoto, Melles-Griot and Hanssen Kubota. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (MPEP 2143.01 (III)).

Here, Sinoto teaches light-modulating information storage and retrieval system, which uses a light projector 10, an information retrieval slide 12, an information storage unit panel 14 and a read-out board 19 (Fig. 1). Sinoto teaches that information storage unit panel 14 includes a plurality of storage cells 18, and each of the storage cells 18 includes four horizontal arrays 20, 22, 24 and 26 each comprising four tiny squares 28, 30, 32, 34 (Col. 2, lines 41-64).

In contrast, Melles-Griot teaches a lens holder, whereby “[t]he body is black chrome coated to reduce scatter and stray reflections.” Further, the Examiner states that “[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to make the material of the polarizer holder of Sinoto having an absorptivity almost equal to 100%, as taught by the Melles-Griot catalog.”(Office Action, page 4).

Applicants respectively assert that this feature of Melles-Griot is contradictory to the objective of Sinoto. This is because Sinoto expressly states that its objective is for no light to be lost from either state of polarization. Both polarization components are preserved and used by the light-modulating information storage and retrieval system. This objective would be undermined by a polarizer holder with a highly absorbing material, as suggested by the Examiner. Accordingly, Applicants respectfully submit that there is no motivation to combine the teaching of Sinoto and Melles-Griot.

Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of claims 13-15 and 18-23.

Also, claim 38 is allowable in that claim 38 recites a combination of elements including, for example, “a plurality of quartz substrate parts, each quartz substrate part comprises one quartz substrate or a plurality of quartz substrates stacked on top of one another; a polarizer

holder having a lattice like structure and directly supporting each quartz substrate part, wherein the polarizer holder includes a material having an optical absorptivity of almost 100%, wherein the polarizer holder absorbs light reflected by the plurality of quartz substrate part, and wherein the polarizer holder, and wherein each quartz substrate part is slantingly supported by the polarizer holder.” However, as the above mentioned reason, none of cited references including Sinoto, Melles-Griot, Hanssen and Kubota teaches or suggests the feature of the present invention.

In the rejection of claim 38, the Examiner admits that the modified Sinoto reference does not disclose “each quartz substrate part is slantingly supported by the polarizer holder.” In an attempt to cure the deficiency of Sinoto, the Examiner turns to Kubota. The Examiner states that “Kubota teaches a plurality of substrate parts (3a, sheets) that are slantingly supported by the polarizer holder (e.g. 4, transparent plates).” But, Kubota fails to teach “each quartz substrate part is slantingly supported by the polarizer holder.” The polarizer holder of the claimed invention includes a material having an optical absorptivity of almost 100%, but the transparent plates 4 of Kubota is not a material having the optical absorptivity of almost 100%. Accordingly, claim 38 is allowable over the cited references.

In view of the above, Applicant believes each of the presently pending claims in this application is in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911.

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Please credit any overpayment to deposit Account No. 50-0911.

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